

# Spring 2011 Game Programming

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305890  
Spring 2011  
3/7/2011  
Kyoung Shin Park  
Multimedia Engineering  
Dankook University

## Course Information

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- Course
  - Game Programming (305890)
  - Spring 2011, 3 credits, 3 hours
  - Course hour: Monday 1:20-4:10
- Instructor
  - Kyoung Shin Park
  - [kpark@dankook.ac.kr](mailto:kpark@dankook.ac.kr)
  - 010-8636-1960 (mobile)
  - The Third Science Hall, Room 417
  - Office hour: Tuesday 1:00-2:00
- Prerequisite courses
  - HCI Programming I (Data Structure, C/C++ Programming), Graphics Programming

2

## Purpose

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- This course introduces the fundamental concepts of 3D computer game programming.
- Students will learn and practice XNA programming basics, game graphics programming techniques, the tools needed for game production.
- In this course, students will form project groups to create a simple computer game using XNA to develop game design skills.

3

## Text Book

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- Microsoft XNA Game Studio 3.0 Unleashed
  - Chad Carter
  - SAMS Publishers
  - <http://my.safaribooksonline.com/book/programming/game-programming/9780768688900>



4

## Text Book

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- Reference Book
  - Core Techniques and Algorithms in Game Programming, Daniel Sanchez-Crespo Dalmau
  - XNA Game Studio 3.0 MSDN  
[http://msdn.microsoft.com/en-us/library/bb200104\(v=XNAGameStudio.30\).aspx](http://msdn.microsoft.com/en-us/library/bb200104(v=XNAGameStudio.30).aspx)

5

## Evaluation

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- Attendance : 20%
- Midterm Exam : 30 %
  - There will be a midterm exam that covers all the subjects discussed in the classroom.
- Individual Assignment : 20 %
- Term Project : 30%
  - Proposal 5%
  - Midterm progress report & presentation 10%
  - Implementation 5%
  - Final report & presentation 10%
- **Class Participation & Attitude: extra 10 %**

6

## Schedule

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- 3/07 : Course Overview
- 3/14 : XNA Preparation  
Vector & Matrix
- 3/21 : Transformation  
Euler, Axis-Angle, Quaternions
- 3/28 : Initialization  
Input  
Term Project Proposal Presentation
- 4/04 : Rendering Pipeline  
Drawing
- 4/11 : Color  
Lighting

7

## Schedule

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- 4/18 : Texturing  
Blending  
Stencil
- 4/25 : Midterm
- 5/02: Term Project Midterm Presentation
- 5/09 : Sound  
Mesh
- 5/16 : Mesh Hierarchy Animation
- 5/23 : Terrain Rendering
- 5/30 : Particle System  
Picking

8

## Schedule

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- 6/06 : Memorial Day (no class)
- 6/13 : Game Physics
- 6/20 : Term Project Final Presentation

9

## Exams

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- Midterm Exam
  - Chapter ~Blending
  - 2-hour close-book exam

10

## Programming Exercises

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- Programming Exercises
  - 5~10 Assignments
  - Turn in all your source codes, executable, short report containing the snapshot

11

## Term Project

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- XNA Game Development
  - Lego Star Wars <http://kr.youtube.com/watch?v=bBbPedf3bns>
  - Fishing Master <http://kr.youtube.com/watch?v=uQhS-N0Tulc>
- Students will work on a semester-long project that will comprise a major part of the class grade.
- Students are encouraged to work on a project related to your own area of interest.
- Projects can be done as groups of two or three.
- Also, the project report should indicate to which portions of the project each member contributed.
- You group project blog will also help monitor your steady progress across the semester.
- Also, the final project report should indicate to which portions of the project each member contributed.

## Term Project

- Project proposal & 5-min presentation (3/28) 5%
  - Project groups will form (2 or 3 students in each group)
  - Once a group is form, send me email
  - 2~3-page (single-space, 10-point font) report
- Project progress report & presentation (4/29) 10%
  - Implementation progress
  - 10 minutes presentation
  - 3~5-page (single-space, 10-point font) report
- Project implementation & Blogging 5%
- Project final report (6/20) 10%
  - 10-20 minutes in-class presentation & demo
  - 10-page (single-space, 10-point font) report
  - Turn in all your source codes & executable

13

## Term Project

- Data Set
  - A collection of 3D models (models.zip 135MB)
  - A collection of textures (textures.zip 17MB)
  - A collection of sound effects (sounds.zip 57MB)

14

## Spring 2007 Students' Term Project



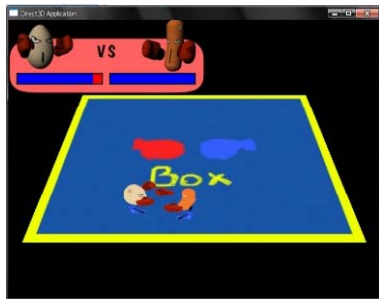
15

## Spring 2007 Students' Term Project

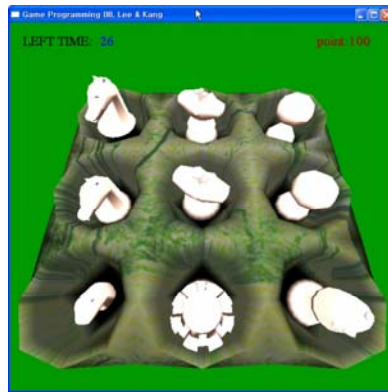


16

## Spring 2008 Students' Term Project



Food Fighter



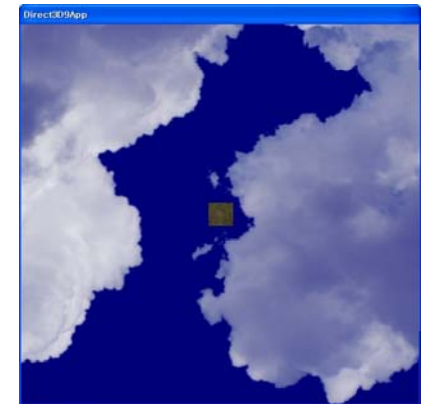
두더지게임

17

## Spring 2008 Students' Term Project



미로게임



Save the Spy

18

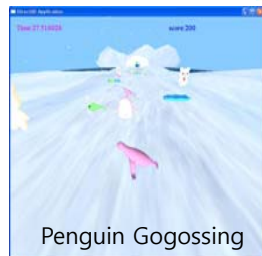
## Spring 2009 Students' Term Project



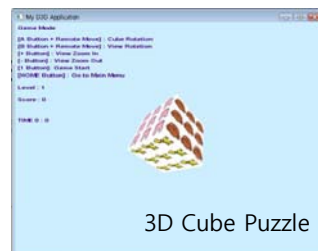
Top Gun



Gone



Penguin Gogossing



3D Cube Puzzle

## Spring 2010 Students' Term Project



Snow Battle



Gladiator

## Announcement

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- Class blog:
  - <http://dis.dankook.ac.kr/lectures/game11/>

